

**AMENDMENTS TO THE CLAIMS**

- 1-16. (Cancel)
17. (Currently amended) A device for use in axial centrifugation, the device comprising:  
a primary chamber;  
a secondary chamber containing a coagulator; and  
a ~~viscoelastic~~ medium separating the primary chamber from the secondary chamber, the device being used in axial centrifugation,  
wherein the medium comprises a separation medium, and  
wherein the separation medium comprises at least one of a silicone gel, polyester gel, thixotropic gel and a combination thereof.
18. (Previously Presented) The device of claim 17, wherein the primary chamber contains an anti-coagulant.
19. (Cancel)
20. (Previously Presented) The device of claim 17, wherein the coagulator comprises calcium.
21. (Previously Presented) The device of claim 20, wherein the coagulator comprises at least one calcium chloride, calcium fluoride, calcium carbonate, calcium gluconate, calcium fumarate, calcium pyruvate, an organic calcium salt and combinations thereof.
22. (Previously Presented) The device of claim 17, wherein the medium comprises a filter, the filter substantially preventing red and white blood cells, originating from blood drawn into the primary chamber, from entering the secondary chamber under a centrifugal force of about 1000 xG or greater, but substantially permitting plasma and platelets originating from the blood to flow into the secondary chamber under a centrifugal force of about 1000 xG or greater.
23. (Cancel)

24. (Currently amended) The device of ~~claim 23~~ claim 17, wherein the separation medium substantially prevents fluid communication between the primary and secondary chambers prior to centrifugation, and moves during centrifugation of about 1000 xG or greater to provide fluid communication between the primary and secondary chambers.
25. (Previously Presented) The device of claim 24, wherein the separation medium substantially prevents red and white blood cells, originating from blood drawn into the primary chamber, from entering the secondary chamber after centrifugation.
26. (Cancel)
27. (Previously Presented) The device of claim 17, wherein the primary chamber is above the secondary chamber during centrifugation.
28. (Previously Presented) The device of claim 17, wherein the primary chamber has a first circumference and the secondary chamber has a second circumference, the first circumference and the second circumference being substantially the same.
29. (Previously Presented) The device of claim 17, wherein the primary chamber has a first circumference and the secondary chamber has a second circumference, the first circumference being less than the second circumference.
30. (Previously Presented) The device of claim 17, wherein at least one of the primary chamber and secondary chamber contains a therapeutic enhancing agent.
31. (Previously Presented) The device of claim 30, wherein the therapeutic enhancing agent comprises at least one of an antibiotic, analgesic, cancer therapeutic, platelet-growth factor, bone morphogenic protein, stem cell, bone graft material, soft tissue graft, platelet-derived growth factor cell culture material, immunosuppressant and a combination thereof.

32. (Currently amended) A device for use in axial centrifugation, the device comprising:  
a first chamber having a first circumference;  
a second chamber having a second circumference and containing a coagulator, the second circumference being greater than the first circumference; and  
a viscoelastic medium separating the first chamber from the second chamber, the device being used in axial centrifugation,  
wherein the medium comprises at least one of a silicone gel, polyester gel, thixotropic gel and a combination thereof.
33. (Cancel)
34. (Previously Presented) The device of claim 32, wherein the coagulator comprises calcium.
35. (Previously Presented) The device of claim 34, wherein the activator comprises at least one of calcium chloride, calcium fluoride, calcium carbonate, calcium gluconate, calcium fumarate, calcium pyruvate, an organic calcium salt and combinations thereof.
36. (Previously Presented) The device of claim 32, wherein the first chamber comprises an upper portion and a lower portion.
37. (Previously Presented) The device of claim 36, wherein the upper portion is separated from the lower portion by a medium substantially preventing fluid communication therebetween.
38. (Previously Presented) The device of claim 37, wherein fluid communication is provided between the upper and lower portions when the device is centrifuged at about 1000 xG or greater.
39. (Previously Presented) The device of claim 38, wherein the lower portion of the first chamber is in fluid communication with the second chamber.
40. (Previously Presented) The device of claim 32, further comprising a therapeutic agent.

41. (Previously Presented) The device of claim 32, wherein the first chamber contains an anti-coagulant.